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CLAIM AMENDMENTS – LISTING OF CLAIMS

This listing will replace all prior versions, and listings of claims in the application.

Please amend the claims as follows:

1. (Currently Amended) A method of direct metal fabrication to form a metal part which has a relative density of at least 96%, said method comprising: a) providing a powder blend which comprises a powdered parent metal alloy, a powdered lower-melting-temperature alloy that comprises greater than 10% of the total weight of the powdered blend, and an organic polymer component that comprise less than 3% by weight of the total weight of the powdered blend; b) performing a layer-build powder processing operation to fabricate a green body having a relative density of at least 58% by laying down successive layers of the powder blend and sintering the layers in accordance with a predetermined pattern; c) positioning the green part in a chamber of the furnace and raising the temperature in the chamber to reduce the organic polymer and then accomplish a supersolidus liquid phase sintering operation to form the metal part that by sinter densification obtains a relative density of at least 96%, wherein the supersolidus liquid phase sintering operation occurs predominately in a temperature range between about 2252 °F to about 2260 °F with a hold time at a maximum holding temperature of ten minutes or less.

2. (Original) The method of claim 1, wherein said polymer comprises two polymers.

3. (Original) The method as recited in claim 2, wherein said two polymers comprise a thermoplastic polymer and a thermosetting polymer.